

Claims

1. Sliding wall with a plurality of laterally displaceable wall elements (1, 2) which are guided by means of running rollers in a carrying profile arranged above the wall elements (1, 2),  
5 at least one of these wall elements (1, 2) being constructed as a rotating leaf (2) which can be actuated by means of a drive unit (55) that is arranged so as to be stationary with respect to the displaceable wall elements (1, 2), wherein actuating means located between the drive unit (55) and the wall element (2) serving as rotating leaf are provided as rod linkage (56) which can automatically operate or be inactive when the wall elements (1, 2) are displaced, characterized in  
10 that the wall elements (1, 2) can be moved manually or by motor individually, wherein a bottom guide (9) that engages in a guide rail (7) that is recessed into the ground or floor is provided at the individual wall elements (1, 2), and in that at least the wall element (2) serving as rotating leaf is swivelable about a first swivel pin (19, 57) and a second swivel pin (14, 15), and the rotating leaf (2) is automatically connected in the lower area of the wall elements (1, 2) by means  
15 of a connection device when the wall elements (1, 2) move together such that it is possible to safely swivel the rotating leaf (2).

2. Sliding wall according to claim 1, characterized in that the swivel pin (57) is arranged in the center in the lower horizontal end area of the wall element (2) and swivel pin (19)  
20 is arranged in the center in the upper horizontal area of the wall element (2).

3. Sliding wall according to one or more of the preceding claims, characterized in that a lever arm (12, 13) is arranged in the wall element (2) in the upper and lower area.

25 4. Sliding wall according to one or more of the preceding claims, characterized in that the lever arm (12, 13) is arranged in an upper and a lower profile (5, 11, 44) of the wall element (2).

30 5. Sliding wall according to one or more of the preceding claims, characterized in that the upper profile is formed by a suspension profile (44) and a leaf profile (11) which are arranged adjacent to one another.

6. Sliding wall according to one or more of the preceding claims, characterized in that a swivel bearing (10) is arranged in the suspension profile (44).

7. Sliding wall according to one or more of the preceding claims, characterized in that 5 a running rail is arranged in the suspension profile (44), a running carriage whose connection to the leaf profile (11) forms the swivel pin (19) being movable in this running rail.

8. Sliding wall according to one or more of the preceding claims, characterized in that the lever arms (12, 13) are arranged in a cutout of the profiles (5, 11, 44).

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9. Sliding wall according to one or more of the preceding claims, characterized in that the connection device comprises two partial elements which correspond with one another and which are integrated at/or in two wall elements (1, 2) which abut with one another.

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10. Sliding wall according to one or more of the preceding claims, characterized in that a first partial element comprises a flat arm in the form of a coupling element (20).

11. Sliding wall according to one or more of the preceding claims, characterized in that a second partial element substantially comprises a fixing element and a locking element.

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12. Sliding wall according to one or more of the preceding claims, characterized in that the fixing element substantially comprises the coupling element and a coupling pin (26) which penetrates this coupling element.

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13. Sliding wall according to one or more of the preceding claims, characterized in that the locking element substantially comprises a connection element (25) with a bore hole (27) for the coupling pin (26), wherein an actuation of the connection element (25) is carried out by a locking bevel (29) in combination with an adjusting screw (24) provided in the connection element (25).

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14. Sliding wall according to one or more of the preceding claims, characterized in that the locking bevel (29) is provided in an end area of a coordinating element (28).

15. Sliding wall according to one or more of the preceding claims, characterized in that 5 two locking bevels (29) are provided at the coordinating element (28), the locking bevels (29) slope down toward the outer edges of the coordinating element (28) and are joined to one another in the central area by a plane unlocking surface (30).

16. Sliding wall according to one or more of the preceding claims, characterized in that 10 the coordinating element (28) has at its end a coupling opening (31) for a coupling projection (42) of the coupling pin (26).

17. Sliding wall according to one or more of the preceding claims, characterized in that 15 the coupling opening (31) has run-in bevels (35) which are adjoined by run-out bevels (36) which pass into an uncoupling section (32).

18. Sliding wall according to one or more of the preceding claims, characterized in that the coordinating element (28) is arranged in an end area of the lower closing profile (5) in which the lever arm (13) is also articulated by means of the second swivel pin (15).

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19. Sliding wall according to one or more of the preceding claims, characterized in that the coupling pin (26) is a rotating part and substantially comprises a locking end (37) with adjoining projection (38) and two frustums (40), which face in opposite directions, and a coupling projection (42).

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20. Sliding wall according to one or more of the preceding claims, characterized in that the coupling projection (42) engages in the bore hole (27) of the connection element (25) when the rotating leaf (2) is swiveled.

21. Sliding wall according to one or more of the preceding claims, characterized in that the connection element (25) is arranged at one end of the lever arm (13) (so as to be swivelable) on one side.

5 22. Sliding wall according to one or more of the preceding claims, characterized in that the locking point of the coupling pin (26) can be adjusted by means of the adjusting screw (24).

10 23. Sliding wall according to one or more of the preceding claims, characterized in that a locking device for locking the lever arm (13) to the lower closing profile (5) is provided at one end of the lever arm (13).

24. Sliding wall according to one or more of the preceding claims, characterized in that the wall element (2) is automated by means of a door closer or a drive unit (55).

15 25. Sliding wall according to one or more of the preceding claims, characterized in that the drive unit (55) is arranged adjacent to the guide rail (7) so as to be stationary.

20 26. Sliding wall according to one or more of the preceding claims, characterized in that a flat arm (56) is associated with the drive unit (55), this flat arm (56) being articulated at one end to a driven shaft (58) of the drive unit (55) and having at the other end a pin (59) or a roller which is fastened in a sliding rail (60) to the leaf profile (11).

25 27. Sliding wall according to one or more of the preceding claims, characterized in that the rotating leaf of the wall element (2) can only be actuated when the coupling pin (26) penetrates completely into the locking element.

28. Sliding wall according to one or more of the preceding claims, characterized in that the adjacent wall elements (1, 2) are automatically secured to one another when the rotating leaf (2) is swiveled.

29. Sliding wall according to one or more of the preceding claims, characterized in that the connection device is constructed as a coupling member and locking member simultaneously.

30. Sliding wall according to one or more of the preceding claims, characterized in that  
5 the drive unit (55) of the rotating leaf (2) is activated by a sensor when the sliding wall is closed.